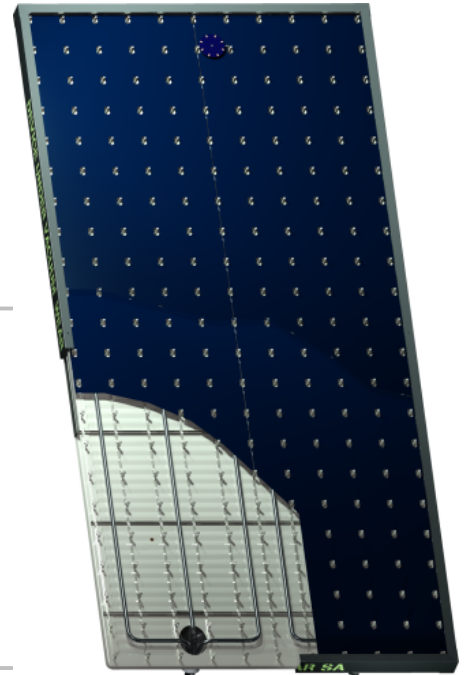


PRODUCT DATASHEET: **LT-Power: for Thermal Applications 45°C to 100°C**

The only solar thermal collector with high efficiency in low irradiance

LT-Power is Thermal Vacuum Power Charged™: a revolutionary, high-end, high-vacuum flat solar thermal panel designed as an ideal thermal energy source up to 100°C for residential and district heating applications. TVP Charged™ are the only panels providing high efficiency performance at 75°C for ambient heating, even under low irradiance, while simultaneously providing sanitary hot water.



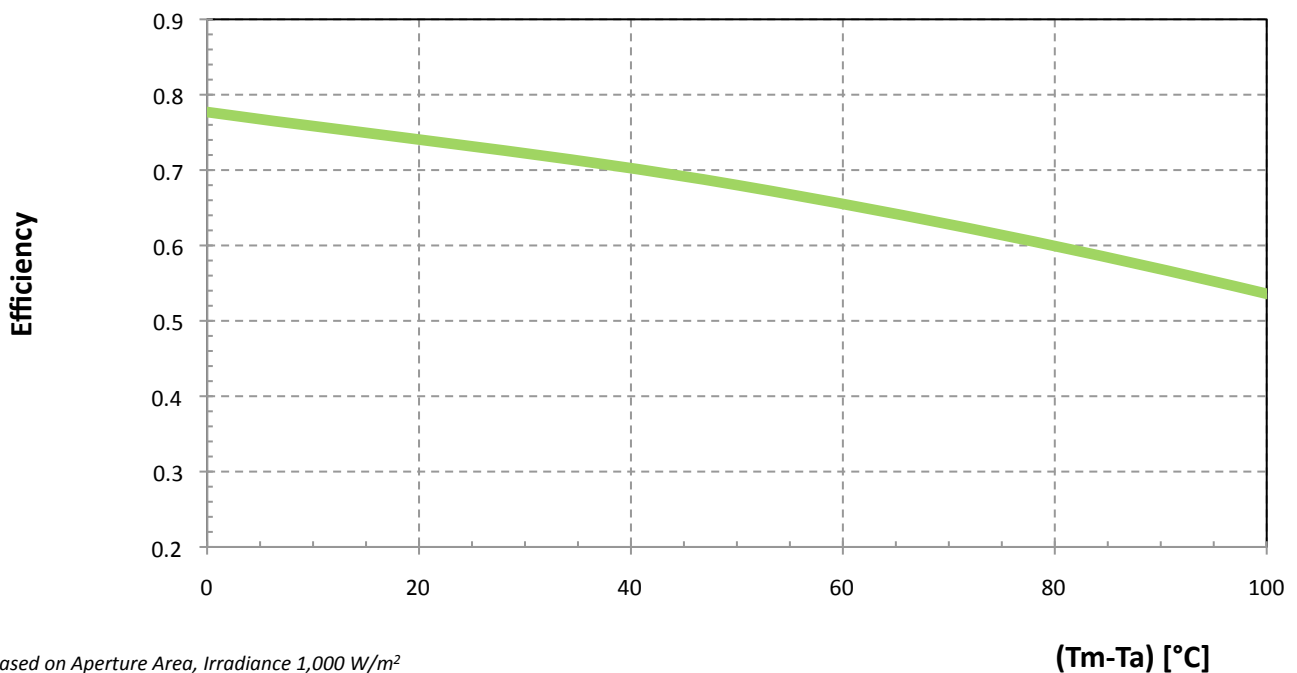
Key FEATURES

- ✓ Unique combination of planar layout and high-vacuum insulation
- ✓ Corrosion-proof all-metal casing
- ✓ Embedded return HTF flow under high-vacuum
- ✓ Made with materials qualified for long-lasting high-vacuum operation
- ✓ Spot-Check™ visual vacuum verification
- ✓ 100% recyclable

Key ADVANTAGES vs. evacuated tubes

- ✓ **Highest efficiency:** due to thermo-fluid flowing entirely under high-vacuum
- ✓ **High performance:** the only panel able to operate at 75°C in bad weather and cold climates
- ✓ **Long durability:** no degradation of performance over long-lasting product lifetime
- ✓ **Smallest installation footprint:** highest aperture-to-gross area ratio

LT-Power Performance Curve



TVP Solar LT-Power Specifications (v4.2x)

<i>Physical Characteristics</i>		
Dimensions	see diagram	
Gross Area	1.95 m ²	21 sq. ft.
Aperture Area	1.84 m ²	20 sqft
Weight per unit Area	53 kg	116 lb
Volume of HT fluid	1.2 L	40 fl. oz.
Heat Absorber-Pipe	Al sheet + Al/Cu co-extruded pipe	
Absorber Coating	Alanod Mirosol TS	
Back-plate Coating	Anti-corrosion	
Glass Coating	Single-sided anti-reflective	
Connecting Ports	SAE J1453/ISO 8484-3	
<i>Operating Conditions</i>		
Stagnation Temperature	220 °C	428 °F
Max. Operating Pressure	10 Bar	145 psi
Pressure Drop @ 100 l/h	1.3 kPa	27 lbs/sqft



The technical drawing shows a rectangular collector with a height of 402.0 mm and a width of 2007.0 mm. It features four fluid ports: two at the top labeled 'FLUID Out' and 'FLUID In', and two at the bottom labeled 'FLUID In' and 'FLUID Out'. The top screw housing distance is 600.0 mm, and the bottom screw housing distance is 38.0 mm. Other dimensions include 181.5 mm for the top offset, 1250.0 mm for the main height, 61.5 mm for the top offset, 143.9 mm for the bottom offset, 2.4 in for the top offset, 967.0 mm for the main width, and 5.0 in for the bottom offset.

Key Range of Applications

Application	Process	Temp Needs / °C	Peak Power
Residential Heat	District Heating	80-100	680 W
	Ambient Heat	25-80	670 W
	Sanitary Hot Water	20-45	720 W
	Pool Heating	35	740 W
Industrial Process Heat	Pasteurization	80 – 110	650 W
	Bleaching	60 – 110	650 W
	Heat Treatment	40 – 60	690 W

Thermal Vacuum Power Charged™

Thermal Vacuum Power Charged™ technology is the foundation for the high-vacuum flat solar thermal panels, providing high efficiency, low cost and long durability.

Using a patented, inorganic and flexible glass/metal seal, TVP Charged™ panels combine the advantages of a traditional planar layout (e.g. minimum dead space and maximum diffuse light capture) and complete suppression of convection losses due to high-vacuum insulation. Built with commonly available, inexpensive materials qualified for long-lasting high-vacuum products over the last 100 years (i.e. light bulbs and cathode ray tubes), the technology is specifically engineered for mass manufacturing.

TVP Charged™ panels harness the full power of solar thermal technology – providing unrivalled performance for any thermal application in any climate condition, without concentration.

